

Aus 6 NZ \$1.50 SA R1.50 US \$1.50

THE Unexplained

MYSTERIES OF MIND SPACE & TIME

50p

6



THE Unexplained

MYSTERIES OF MIND SPACE & TIME

Published weekly by Orbis Publishing Limited
Orbis House, 20/22 Bedfordbury, London WC2N 4BT

Volume 1 Issue 6

Consultants to The Unexplained

Professor A. J. Ellison
Dr J. Allen Hynek
Brian Inglis
Colin Wilson

Editorial Director

Brian Innes

Editor

Peter Brookesmith

Deputy Editor

Jean Elgie

Chief Sub Editor

Nigel Flynn

Sub Editors

Hildi Hawkins
Jenny Dawson

Picture Researchers

Anne Horton
Paul Snelgrove
Editorial Manager
Clare Byatt
Art Editor
Stephen Westcott
Designer
Richard Burgess
Art Buyer
Jean Hardy
Production Co-ordinator
Nicky Bowden
Circulation Director
David Breed
Marketing Manager
Michael Joyce

Contents

Out-of-the-body experiences THE DISEMBODIED SELF 101

What does it feel like to have your consciousness separate from your physical body? Part 1 looks at this peculiar experience
Jenny Dawson

Hypnosis REMEMBRANCE OF THINGS PAST 104

Many people believe that the everyday details recalled by regressed subjects are proof of reincarnation
David Christie-Murray

UFO PHOTO FILE 108

Amazing photographs of UFOs from Switzerland, Texas,

Minnesota and outer space!

Extra-sensory perception THE WARNING VOICE 110

How could we make use of the gift of precognition?
Roy Stemman

Black Madonnas THE GODDESS BEHIND THE MASK 114

The ancient symbolism behind these strange statues
Richard Leigh and Michael Baigent

Black holes THE WAY TO THE STARS 118

The final part in this series explains how an astronaut could return from a black hole
Adrian Berry

In next week's issue

The final part of **Sea monsters** deals with the work of Dr Bernard Heuvelmans, who has identified nine different types of monster. In our new series on **UFO identification** we show how to distinguish between a UFO and

other objects. In **Hypnosis** we describe how blind people have been used as subjects for hypnotic regression. The final part of **Extra-sensory perception** discusses how ESP can be put to work – for good or evil purposes. Part 1 of **Count St Germain** reveals fascinating details about this strange man.

Picture acknowledgements

Cover: Photri; British Museum Dept of Prints and Drawings (inset); 101: Michael Holford; 102: Sonia Halliday (t); British Museum Dept of Prints and Drawings (b); 103: Cooper-Bridgeman Library (t); 104: Mary Evans Picture Library; 105: Robert Estall (t); Mike Duffy/York Archaeological Trust (c); Picturepoint (b); 106: Mary Evans Picture Library (t and c); 107: Mansell Collection (t); National Portrait Gallery, London (b); 108: Ground Saucer Watch Inc (t and b); 109: Ground Saucer Watch Inc (t, c and b); 110: Topham (t); 110-11: Popperfoto (c); 111: Mary Evans Picture Library (b); National Maritime Museum (br); 112: Robert Hunt Library (t); Lauros-Giraudon (tr); Topham (c); Photri (b); 113: Mary Evans Picture Library (t); John Hillelson Agency/Sygma (c and b); 114: Polish Institute and Sikorski Museum; 115: Giraudon (t); William MacQuitty (bl); Michael Holford (br); 116: M. Vautier (t); Mansell Collection (b); 117: Scala (t); National Gallery, London (b); 118: Illustration by Tony Roberts/Young Artists; 119: artwork by Ed Stuart; 120: artwork by Ed Stuart (t); Hale Observatories (b); inside back cover: Arnold Desser; Roy Hudd (inset t); Mary Evans Picture Library (inset b); back cover: Colin and Janet Bord

NEXT WEEK



YOU CAN ORDER YOUR FREE VOLUME 1 BINDER

Your copies of THE UNEXPLAINED are now building up into the most definitive work ever published about the great mysteries of mind, space and time.

To help you look after them properly, we are offering you this superb volume 1 binder absolutely FREE when you place a regular order for future binders.

**You'll find your FREE binder order form
NEXT WEEK!**

The Unexplained Price U.K. 50p. Aus. & N.Z. \$1.50. S.A. R1.50. U.S.A. \$1.50.
How to obtain copies of The Unexplained Copies are obtainable by placing a regular order at your newsagent, or by taking out a subscription.

Subscription Rates

For six months (26 issues) £15.00. for one year (52 issues) £30.00. Send your order and remittance to The Unexplained Subscriptions, Punch Subscription Services, Watling Street, Bletchley, Milton Keynes, Bucks MK2 2BW, being sure to state the number of the first issue required.

Back numbers

U.K. & Eire: Back Nos are obtainable from your newsagent or from The Unexplained Back Nos, Orbis Publishing Ltd, 20/22 Bedfordbury, London WC2N 4BT – 50p each, post free.

Australia, New Zealand, South Africa, Europe & Malta: Back Nos are available at cover price from your newsagent. In case of difficulty write to the address in your country given for binders. South African readers should add sales tax.

How to obtain binders for The Unexplained

U.K. and Eire: Details of how to obtain your binders (and of our Special free binder offer) will be in issue seven.

Australia: Binders are available through your local newsagent price \$7.25. In case of difficulty write to The Unexplained Binders, Gordon and Gotch (Aus) Ltd, 114 William Street, PO Box 767G, Melbourne, Vic, 3001.

New Zealand: Write with remittance of \$6.60 plus \$1.21 sales tax per binder to The Unexplained Binders, Gordon and Gotch (NZ) Ltd, PO Box 1595, Wellington.

South Africa: Binders are available through your local newsagent or through any branch of Central News Agency, price R5.75. (please add sales tax). In case of difficulty write to The Unexplained Binders, Intermap, PO Box 613 Cape Town, PO Box 938 Durban or PO Box 10799 Johannesburg.

Europe: Write with remittance of £4.00 per binder (including postage and packing) payable to Orbis Publishing Ltd, to The Unexplained Binders, Orbis Publishing Ltd, 20/22 Bedfordbury, London WC2N 4BT, England, being sure to state the volume number(s) required.

Malta: Binders are obtainable by ordering from your local newsagent price £3.25. In case of difficulty write to The Unexplained Binders, W.H. Smith-Continental Ltd, PO Box 272, 18a Scots Street, Valletta.

NOTE: Binders and Back Numbers are obtainable subject to availability of stocks. Whilst every attempt is made to keep the price of issues and binders constant, the publishers reserve the right to increase the stated prices at any time when circumstances dictate.

Many people have suddenly found themselves in the peculiar position of existing outside their own bodies, looking at the world from some detached, external point. JENNY DAWSON describes the circumstances in which such out-of-the-body experiences take place



The disembodied self

ASTRAL PROJECTION, ESP projection and spontaneous projection are just some of the terms that refer to the same phenomenon – an out-of-the-body experience (OOBE). This is an experience in which a person leaves his physical body and appears to view the external world from a position that is completely divorced from his material body. It has been widely reported in both psychic and medical journals and it appears to be a relatively common experience.

The circumstances in which an OOBE occurs vary considerably. Stress seems to be a significant factor and many people have reported experiencing the sensation of leaving their bodies when undergoing an operation, after an accident or when seriously ill. But there are numerous cases of people who were asleep or going about everyday tasks, such as shopping or gardening, when the experience occurred.

From accounts given by those who have had an OOBE, the general sensation is at first indistinguishable from the ordinary physical

state, except for a feeling of buoyancy and positive well-being. Some subjects have mentioned that their 'phantom' or 'astral' body seemed to remain attached to their physical body by a thin cord, enabling them to return to their normal state.

The word 'astral' is used to describe a second body within the physical one. It is an exact copy of the flesh and blood version, but is made of finer material and has a luminous appearance. It is apparently capable of separating itself from the physical body and travelling about, passing through solid objects. The astral body exists in what is called the astral plane, which includes the everyday world, but extends beyond it. It is also said to survive death.

References to the astral body abound in ancient literature. Ancient Indian writings tell of eight *siddhis* (supernormal powers) that can be acquired through meditation. The sixth *siddhi* is 'flying in the sky', presumably indicating astral projection. A religious belief common to some cultures is that

The ancient Egyptians thought of the astral body, or *ba*, as a bird with a human face. At death, the bird would leave the physical body, but hover close to it



Left: in his second Epistle to the Corinthians, St Paul refers to a man who had had an out-of-the-body experience

Below: the great mystic poet and painter, William Blake, portrays the reunion of the soul and the physical body in this illustration of Robert Blair's poem, *The grave*, published in 1813

the *shaman* (a kind of priest-doctor) is able to leave his body at will and escort the souls of the dead to the land of tribal ancestors.

It appears from drawings that the ancient Egyptians believed that the astral plane was entered by 10 gates and seven doors. They thought of the soul or astral body as a bird, independent of gravity (a puny soul was symbolised as a mouse!).

Among the many Biblical references to astral projection, St Paul describes a man he knew who 'whether in the body or out of the body, God knoweth, was caught up into paradise and heard unspeakable words, which it is not lawful for a man to utter' (2 Corinthians 12:3).

Widespread beliefs

The modern idea that it is wrong to awaken a sleepwalker may be traced back to the primitive belief that to do so would prevent the soul, or astral body, from returning. Even more frightening is the belief, common in Haiti, that the soul can be stolen by evil beings and its owner subsequently enslaved – the zombies of Haiti are deemed to be bodies without souls.

In 1978, Dean Shiels, Associate Professor at the University of Wisconsin, USA, published the results of his cross-cultural study of beliefs in OOBES. He had collected data from nearly 70 non-Western cultures and this revealed that the belief in OOBES occurred in about 95 per cent of them. Despite the need for further research, Professor Shiels remarked that 'the near-universality of OOBES beliefs and the consistency of the beliefs is striking.'

The notion of the astral body has a continuous history in the West, too –

medieval scholars wrote of the soul as the *anima divina* or *anima humana*. Dante's *Purgatorio* (canto 25), written in the 14th century, says that after death the soul 'around it beams its own creative power, like to its living form in shape and size . . . the circumambient air adopts the shape the soul imposes on it.'

One of the few men whose ability to travel astrally was acknowledged by the Roman Catholic Church was St Anthony of Padua (1195–1231). St Anthony was a Portuguese Franciscan friar who won a great reputation as a preacher in southern France and Italy. He is the patron saint of the poor and is often called upon for the return of lost property.

It is said of St Anthony that one day in 1226, when he was preaching in a church in Limoges, he suddenly remembered that he was supposed to be reading a lesson at another church on the other side of town. St Anthony stopped his sermon, pulled his hood over his head and knelt silently for several minutes. During that time, monks in the other church saw the saint suddenly appear in their midst, read the lesson, then



The near-death experience

Many people have experienced an OOBEx for the first time through being involved in a serious accident. In 1964 David Taylor and a friend were spending the last few weeks of their tour of East Africa in northern Tanzania, when they had a serious collision with a lorry. David nearly died as a result of his injuries.

'We had been driving through the game park and had just turned on to the main road to Moshi. It was dusk and I was sitting half-asleep in the passenger seat.

'I was suddenly woken by my friend, who was delighted to see the first vehicle we had come across in six hours, driving down towards us. Either my friend or the other driver must have been half-asleep, too, for within seconds the two vehicles drove smack into each other.

'As the two vehicles collided, I suddenly found that I was watching the

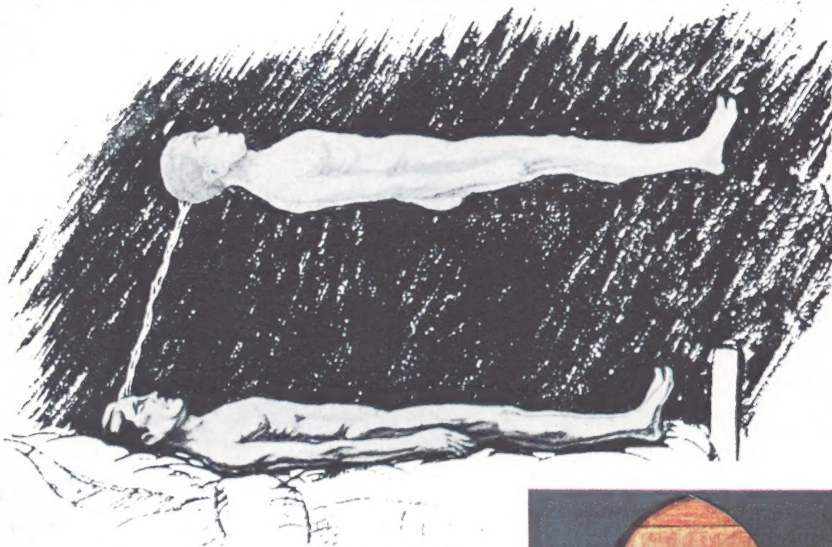
scene from several yards up in the air, as if I were suspended above the road. I saw our own Land-Rover colliding with a large lorry. I watched as I was thrown from the Land-Rover and my friend then climbed out unhurt and came back to examine my body. I also saw the lorry drive off. I remember thinking that I looked a terrible mess lying there on the road and could well be dead.

'The next thing I knew was coming to in Moshi Hospital. I had been unconscious for two days with serious injuries. I told my friend what I had seen and he confirmed that it was indeed a lorry that had run into us and that it had driven on. I had only been saved because another car had come down the road soon afterwards and taken me to the hospital.

'The whole experience, even after all these years, has left me completely unafraid of death.'

Below left: the astral body lying above the physical body at the start of an OOBEx. The 'cord' that connects the two bodies has been mentioned by some subjects as the means by which they can return to a normal state

Bottom: St Anthony of Padua's ability to leave his physical body enabled him to preach to two congregations at once



just as suddenly disappear again. St Anthony returned to his kneeling body and continued his sermon.

During recent centuries, many notable writers have described their own experiences of spontaneous projection or those of colleagues, among them Walter de la Mare, T. E. Lawrence, Jack London and Guy de Maupassant. Ernest Hemingway experienced the sensation of quitting his body when he was hit by shrapnel during the First World War. He later described it as

... my soul or something coming right out of my body, like you'd pull a silk handkerchief out of a pocket by one corner. It flew around and then came back and went in again, and I wasn't dead any more.

The phenomenon of OOBEx raises considerable problems for philosophers and psychologists. Many sceptics maintain that

any suggestion of an OOBEx should be dismissed as an hallucination or delusion. But people who have had such experiences are adamant that they have, indeed, taken place. Even when unconscious at the time of the experience, some people have later described what was going on around them and those present have confirmed their accounts. Subjects who experience this phenomenon are fully aware that they are in an out-of-the-body state.

Many subjects who have had an OOBEx while on the operating table or after a serious accident say that the experience has profoundly changed their view of life and dispelled any fears about dying. An interesting theory on this type of projection, or 'near-death experience' (NDE) has been put forward by Doctor Carl Sagan, director of the Laboratory for Planetary Studies in New York. He describes the phenomenon of NDE in these terms:

Every human being has already had an experience like that of travellers who return from the land of death; the sensation of flight and the emergence from darkness into light; an experience in which the heroic figure may be dimly perceived, bathed in radiance and glory. There is only one common experience that matches this description. It is called birth.

In times of mortal danger or acute emotional stress, perhaps one is able to retrieve these memories of birth and, once again, leave the darkness – the suffering body – and rise towards freedom and the light.

Do out-of-body experiences provide evidence for life after death? See page 144



Remembrance of things past



Believers in reincarnation find the details of everyday life recalled under hypnosis are proof of previous lives. DAVID CHRISTIE-MURRAY discusses whether these are more important than a knowledge of major historical events

The Jews of York met a violent end as a result of persecution by Christians, in the massacre of 1190. One of Arnall Bloxham's subjects, Jane Evans, regressed to the previous life of Rebecca, one of the Jews who was murdered

IF THERE WERE a place in the *Guinness book of records* for the greatest number of past lives one individual was able to recollect, it would probably go to a patient of Dr Blanche Baker of San Francisco. This patient, born in Utah of Scots-English-American ancestry, boasted a total of 47 previous lives – 23 as a man, 24 as a woman. Historical details revealed by this patient were later found, it is claimed, to be accurate.

But the recollection of past lives aroused in Dr Baker's patients resulted not from a direct suggestion that they should return to previous existences, but by a light, hypnotic free association technique first used in 1950. Under this form of hypnosis, Dr Baker's patients experienced scenes of violence,

death and curious personal relationships, in which the senses of sight, smell, taste and touch played important parts, accompanied sometimes by physical pain and acute emotional anguish.

The feeling of pain and grief experienced by many patients under hypnotic regression answers in many ways the oft-asked question, 'If we have lived before, why do we not remember past lives?' There would seem to be a natural tendency for the mind to suppress memories of events or scenes that have caused pain and distress. So it would not be surprising for people to forget or positively wish to forget previous lives that were painful or unpleasant. And under hypnotic regression it is those events that have caused extreme physical and mental pain in previous lives that are often the most vivid memories recalled.

Traumas from the past

Take the case, for example, of Jane Winthrop, a name assumed by another of Dr Baker's patients. Under hypnosis, Jane became Mary Dunlap, a settler in 18th-century Massachusetts who lost her husband, Allan. 'Certainly,' said Jane Winthrop, 'I have never consciously known such overpowering grief as I relived each time I spoke of Allan's death,' adding: 'That which comes from any of us must be first within us.'

Here Jane Winthrop touches upon an important element in the belief in reincarnation. Just as in this life much of what we are is the result of forgotten or unconscious schooling and instruction, so, our present selves, reincarnationists believe, are similarly made up of experiences from previous lives, which we have also forgotten. As in this life a neurosis may be caused by a childhood trauma and cured by its being uncovered under hypnosis and brought to the patient's conscious memory, so a trauma from a past life may be revealed and its discovery heal the present-life neurosis it has caused.

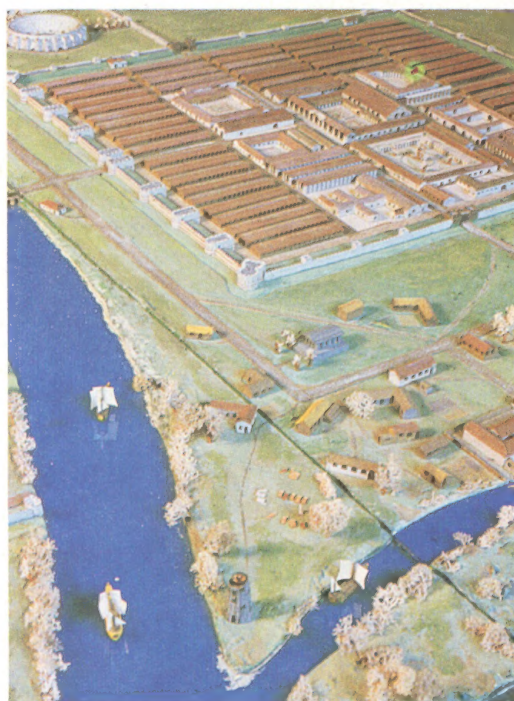
Whatever the explanation of former 'lives', the vividness of them and the emotions they arouse are convincing to those undergoing the experience and to some observers as well. Yet vividness and conviction do not in themselves guarantee truth. Barbara Larson, a university graduate, a teacher until her marriage and mother of three, was hypnotised in middle age and became Sam Sneed (1853–96), a cocky young gambler and cardsharp. Sneed's whole career was portrayed from a 19-year-old gamester, swaggering across America, hopping trains one jump ahead of the lawmen of the towns in which he played, through salesman and entrepreneur to solid citizen, selling advertising and writing editorials for the *Sacramento Bee*. Shot by a Frank Jordan, whom he had accused of corruption, he was buried in Sacramento cemetery.

Such a bare narrative cannot do justice to the intense vividness of the regression;

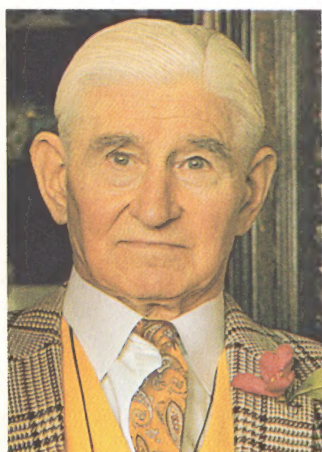


Above: part of the Ontario landscape in Canada that Joanne McIver claimed to recognise from her previous life, some 100 years before, as Susan Ganie

Right: a model of Eboracum, the Roman city of York. This was the home of Livonia, one of the previous lives of Jane Evans



Below: Arnall Bloxham, a distinguished British hypnotherapist, has tape recorded over 400 cases of regression. Some of his subjects have regressed to as many as 14 quite separate former lives spread out over many centuries



as one observer wrote: 'To watch the transformation of swaggering Sam Sneed into a charming, attractive Californian matron was an astonishing experience. For two hours I had been so caught up with the life of this Personality Kid that I felt I knew him better than most of my friends, because this seemed to be the inner man speaking. Those who have since heard the tape recording capture this same intensity of feeling, and roar with laughter at his broad sallies.'

Yet there is no evidence that Sam ever lived, and many errors were discovered in his story. Mrs Larson, rehypnotised and challenged in Sam's person about the proved errors, insisted his story was true. It is a principle of hypnotic theory that subjects under hypnosis do not lie if specifically told to tell the truth. One would have expected Sam to lie, and in this he was 'true' to his character. What the hypnotist does not seem to have done is to have hypnotised Mrs Larson in her own person and asked her for

the source of her fantasy – if it was one.

More probable was the study by Jess Stearn, published in 1969, of Joanne McIver's previous life as Susan Ganie. Joanne, who lived at Orillia, some 80 miles (129 kilometres) north of Toronto, was regressed by her father during her teens, and produced some half dozen former lives, of which five were fragmentary compared with that of Susan Ganie. Her story was that she was born about 1835 in St Vincent Township, Ontario, some 90 miles (145 kilometres) from Sydenham Township, later Owen Sound, near where the McIvers live today. Susan married Thomas Marrow, a tenant farmer, in July 1849, the ceremony being conducted by an itinerant preacher called McEachern, and they settled at Massie village. Thomas was killed in an accident in 1863, and Susan died after a completely uneventful existence as farmer's wife and widow, in 1903.

The search for proof

Though 19th-century provincial records of births and deaths are incomplete, some confirmation of the Ganie story was found. Ganie's farm was shown on a contemporary map issued by the Ontario Department of Lands and Forests. Massie exists, though it does not appear on most maps, and a Vail's Point, mentioned by Susan, also exists. The tombstone of her close friend, Mrs Speedie, a postmistress, who died in 1909, can still be seen in Annan, a nearby village. Arthur Eagles, an octogenarian in 1969, remembered the Ganie family, knew Susan Marrow, whom he used to drive as an old lady into Owen Sound, and recalled that his parents had told him that Thomas and she were man and wife. The Toronto Department of Public Records confirmed the existence of people previously named by Joanne: Mrs Speedie, Robert MacGregor, the blacksmith in Massie, Joshua Milligan, storekeeper, and William Brown, miller.

Susan's knowledge of details of contemporary life was correct. Sugar came in packages at 10 cents a box, saddles cost from \$7.50 to \$12, oranges were greatly prized and a Democrat was a kind of wagon, peculiar to that time and place (this last item, however, seems known generally to Canadians). Joanne claimed to recognise places known to Susan, including the churchyard, a barn and her old home, and identified a well where none had been known to exist. At one period during the investigation she felt herself to be Susan Ganie, as if she were moving in two worlds simultaneously, with confusion of memories of past and present lives. When regressed her voice changed from its normal huskiness to a lighter, musical treble, and the depth of her emotions under hypnosis, especially her joy after marrying Tommy, her recreation of scenes delineating her relationships and the vivid pictures she gave of the Canadian wilderness were beyond acting or



any impression given by reading books.

The majority of the 400 regressions achieved by hypnotherapist Arnall Bloxham were of lives as uneventful as that described by Susan Ganier. Some, however, detailed in Jeffrey Iverson's books, *More lives than one?* (1976) and featured in broadcasts and on television, are intensely dramatic. One of the best known of his subjects is Jane Evans, who has been regressed to six previous lives.

First she was Livonia, living in AD 286, wife of Titus, tutor to Constantine, later Roman Emperor, son of Constantius and Helena, living at Eboracum (York). Livonia and Titus were converted to Christianity by a woodcarver named Albanus and died violently in Diocletian's reign. Professor Brian Hartley, an expert on Roman Britain, stated that Livonia knew 'some quite remarkable historical facts, and numerous published works would have to be consulted if anyone tried to prepare the outline of such a story.'

Where the facts could be checked, most of them proved correct. It was possible that Constantius could have been Governor of Britain from AD 283 to 290 because historians know nothing of these 'missing' years of his life. Hartley, however, questioned some details such as Livonia's statement that Roman ladies rode on horseback.

Mrs Evans' second life as Rebecca, a Jewess, showed an entirely different personality. She was massacred in 1190 with many other Jews in the crypt of St Mary's Church, Castlegate, York, where no crypt was known, until it was discovered in 1975, several years after the regression. Professor Barrie Dobson, author of a book on the massacre, commented that Jane's story was true to what was known of the events and the times, that much of the detail was impressively



The medieval home (above left) of a wealthy merchant prince, Jacques Coeur (inset), at Bourges in the Loire Valley, where Jane Evans lived as Alison, a teenage servant. Under hypnosis, Mrs Evans gave a remarkably accurate description of life in France at the time of Charles VII

accurate, that disputed facts could well be true and some could have been known only to professional historians. There are some anachronisms where memories of the present life and a previous life may have become confused. But Rebecca's terror when the murderers enter the crypt is, as usual, beyond acting.

Her third life, as Alison, the teenage servant of a French merchant prince, Jacques Coeur, has been criticised on the grounds that all the facts about Coeur are readily available to British readers. Mrs Evans' knowledge included a description of the merchant's mansion at Bourges in the Loire Valley with its courtyard and style of architecture in the year 1450. She also showed a detailed knowledge of medieval French history and the life of her master, though she omitted obvious facts such as he was married and had five children.

Yet if Jane Evans' knowledge had been gained only from books she would have known these facts, and, if she had been faking, would have produced them. She



Left: one of Mrs Evans' brief regressions was as lady-in-waiting to Catherine of Aragon (1486–1536), when the young princess was about to depart from Spain in 1501 to marry Prince Arthur, eldest son of Henry VII of England

Below left: Queen Anne, who reigned from 1702 to 1714, with her son William, Duke of Gloucester. In her fifth life, Mrs Evans was a London sewing-girl, Anne Tasker, who referred to the death of the young prince, though she inaccurately described him as the Queen's only son

referred to the king, Charles VII, by his nickname of 'Heron Legs' – his thin shanks looked ridiculous in yellow tights – gossiped about his mistress, Agnes Sorrel, and other personalities, and repeated the rumour that Louis, the Dauphin, had murdered his wife. Alison also mentioned a golden 'apple' containing jewels, listed as a 'grenade' (that is, pomegranate) in a catalogue of items confiscated by the Treasury from Coeur.

Mrs Evans' fourth remembered incarnation was as Anna, lady-in-waiting to Catherine of Aragon at the time she was about to leave for England to marry Henry VII's son, Arthur. She again gave correct

historical details but revealed nothing remarkable. Nor did she reveal much in her fifth life, as Anne Tasker, a London sewing-girl in Queen Anne's time at the turn of the 17th and 18th centuries. She made one reference, however, which illustrates a difficulty for researchers in this field. She referred to the death of William, the Queen's 'only child', an allusion which critics fasten upon as an obvious inaccuracy. Yet it is true in the sense that Anne's son, upon whom all her hopes rested, was her only *remaining* child. Hit or miss?

Mrs Evans' last incarnation before her present life was as Sister Grace, born in 19th-century Des Moines, Iowa, and a member of an enclosed order. The nun has not been identified, because no registration of birth in Iowa was required until the 1920s and although censuses existed, they were not accurate. All that is known is that Sister Grace showed a knowledge of contemporary events that Jane seemingly did not have.

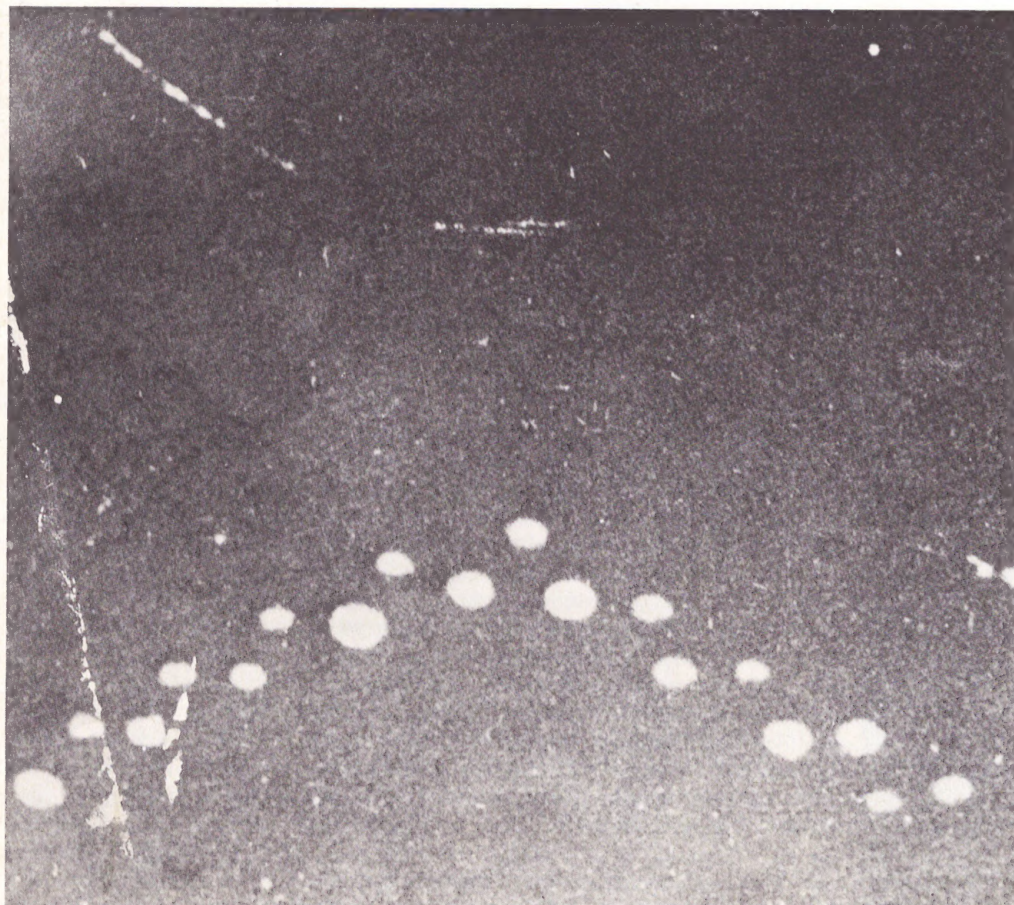
It is reasonable to expect that Mrs Evans would have spoken the languages of her incarnations, and a considerable research has been carried out on paranormal speaking in foreign tongues. However, most subjects, when regressed to previous lives in other lands, do not adopt the language of the time or the country. When Arnall Bloxham was asked if any of his subjects spoke in a foreign tongue, he replied no, for if they had he would not have understood them. But his subjects pronounced the names of cities and people correctly according to the pronunciation of the country (not Munich, for example, but 'München').



On page 126, we look at the phenomenon of speaking in a foreign tongue (*xenolalia*)



Above: this impressive photograph was taken during the Gemini XII space mission on 12 November 1966. Analysis has shown that the UFO that appears on the right of the picture is a distant object – but the NASA Photo Evaluation Lab claims this is actually rubbish that has been discarded from the Gemini XII spacecraft itself.



Left: at about 9.10 p.m. on 25 August 1951 a group of five professors and a post-graduate student were relaxing outside the house of Professor W.I. Robinson in Lubbock, Texas. Suddenly they saw a formation of bright lights flying rapidly across the sky. The professors estimated their speed at around 1800 miles per hour (2900 km/h) at a height of about one mile (1.5 kilometres). Sceptics claim that the lights were nothing more than reflections from the bellies of flying ducks – but if so, they would have been flying at more than 125 miles per hour (200 km/h) – which is far too fast for ducks!

Below: this UFO was observed by three witnesses near Saas-fee, Switzerland, on 26 July 1975. It seemed to be metallic and was difficult to make out against the mountain fog, and was reported to be humming softly.

The photograph has been rigorously analysed by the American UFO organisation Ground Saucer Watch Inc., of Phoenix, Arizona. The techniques they use can reveal a

number of details not immediately apparent from the photograph – including the time, to within an hour, at which the photograph was taken, the apparent size of the UFO, its distance from the camera, and any supporting threads or structures that may indicate a hoax.

The black-and-white picture (right) shows a computer digital image enhancement of the original. It passes the test.



Below: another photograph that has passed GSW's computer tests, this was taken by Deputy Sheriff Strauch while on a hunting trip in Gibbon, Minnesota, USA on 21 October 1965. It shows a typical UFO – a bright, blurred, disc-shaped light – and illustrates the difficulty of taking accurate colour pictures of UFOs in poor light conditions; the strange colour of the sky makes it possible to deduce that the original object was probably red, another feature that links it with other UFO sightings.



The sinking of the Titanic, the assassinations of the Kennedy brothers and the Aberfan disaster – all these have been subjects of premonitions. ROY STEMMAN describes some spectacular successes achieved by those with the fascinating gift of precognition

AT 5 O'CLOCK one morning in 1979 a knock at her apartment door woke Helen Tillotson from a deep sleep. She heard her mother calling, 'Helen, are you there? Let me in!' Helen hurried to the door to find out what was wrong. Her mother, Mrs Marjorie Tillotson, who lived in a Philadelphia apartment block across the street, demanded to know why Helen had been knocking on *her* door minutes earlier.

Helen, 26, assured her mother that she had retired at 11 o'clock the previous night and had not woken up until she heard her mother knocking at the door. 'But I *saw* you. I *spoke* to you,' said Mrs Tillotson. She said Helen had told her to follow her home immediately without asking questions.

Suddenly there was a loud noise from outside. Both women rushed to the window: across the street a gas leak in Mrs Tillotson's block had caused an explosion, and her apartment was gutted. 'If she had been asleep there at the time,' said a fire chief, 'I doubt whether she would have got out alive.'

Had Helen been sleep-walking? Or did her mother have a psychic vision? Whatever the explanation, either mother or daughter had apparently sensed the danger of an explosion, and saved Mrs Tillotson's life. Such incidents are known as premonitions; although they are rare, enough cases have been documented to suggest that some people are able to catch a glimpse of the future.

Early in 1979 Spanish hotel executive Jaime Castell had a dream in which a voice told him he would never see his unborn child, which was due in three months. Convinced that he would die, Castell took out a £50,000 insurance policy – payable only on his death, with no benefits if he lived. Weeks later, as he drove from work at a steady 50 mph (80 km/h), another car travelling in the opposite direction at over 100 mph (160 km/h) went out of control, hit a safety barrier, somersaulted and landed on top of Castell's car. The drivers of both cars were killed instantly.

After paying the £50,000 to Castell's widow, a spokesman for the insurance company said that a death occurring so soon after such a specific policy was taken out would normally have to be investigated thoroughly. 'But this incredible accident rules out any suspicion. A fraction of a second either way and he would have escaped.'

Sometimes a number of people have dreadful forebodings of the same event. Many of them have no direct connection

The warning voice



with the tragedy they foresee, but some, like Eryl Mai Jones, become its victims. On 20 October 1966, this nine-year-old Welsh girl told her mother she had dreamed that when she had gone to school it was not there. 'Something black had come down all over it,' she said. Next day she went to school in Aberfan – and half a million tons of coal waste slithered down onto the mining village, killing Eryl and 139 others – most of them children.

After the disaster, many people claimed to have had premonitions about it. They were investigated by a London psychiatrist, Dr John Barker, who narrowed them down to 60 he felt were genuine. He was so impressed by the evidence for premonitions of the tragedy that he helped set up the British Premonitions Bureau, to record and monitor predictions. It was hoped the Bureau could be used

Above: the terrible events of 21 October 1966, when the entire Welsh mining village of Aberfan was obliterated by coal waste, were foreseen by many people. Among them was nine-year-old Eryl Mai Jones (inset), who became one of the victims

Far right: the Titanic, the 'safest ocean liner ever built', which sank on her maiden voyage in 1912. Journalist W.T. Stead (right), one of the many who drowned, had published a strangely prophetic story a few years earlier about a similar tragedy

to give early warning of similar disasters and enable lives to be saved. Unfortunately it has not yet proved to be of very much practical use.

A similar attempt to harness predictions is now in operation in the United States. An earthquake is expected on the San Andreas fault in the near future and it is hoped it will be possible to predict its date by monitoring premonitions so that a mass evacuation can be made before the event.

When Dr Barker analysed the Aberfan premonitions he noticed that there was a gradual build-up during the week before the Welsh tip buried the school, reaching a peak on the night before the tragedy. Two Californian premonition bureaux – one at Monterey, south of San Francisco, the other at Berkeley – are now sifting through predictions from members of the public in the hope of detecting a similar pattern.

Sceptics often point out that information about premonitions is published only after the event, and that the vast majority of such predictions are discarded when they are found to be wrong. This may be true in many cases, but there are exceptions.

Prophet arrested

A Scottish newspaper, the *Dundee Courier & Advertiser*, carried a story on 6 December 1978, headlined 'Prophet didn't have a ticker'. It told of the appearance of Edward Pearson, 43, at Perth Sheriff Court, charged with travelling on the train from Inverness to Perth on 4 December without paying the proper fare.

Pearson – described as 'an unemployed Welsh prophet' – was said to have been on his way to see the Minister of the Environment to warn him about an earthquake that would hit Glasgow in the near future. The *Courier's* readers doubtless found it very amusing. But they were not so amused by the earthquake that shook them in their beds three weeks later, causing damage to buildings in Glasgow and other parts of Scotland. Earth-

quakes in Britain are rare. Prophets who predict them are even rarer.

The most remarkable prophecy ever made must surely be the story of the *Titanic*, the great ocean liner which sank on her maiden voyage in 1912 with terrible loss of life. In 1898 a novel by a struggling writer, Morgan Robertson, predicted the disaster with uncanny accuracy.

Robertson's story told of a 70,000-tonne vessel, the safest ocean liner in the world, which hit an iceberg in the Atlantic on her maiden voyage. She sank and most of her 2500 passengers were lost because, incredibly, the liner had only 24 lifeboats – less than half the number needed to save all the passengers and crew on board.

On April 14, 1912, the real-life tragedy occurred as the 66,000-tonne *Titanic* was making her maiden voyage across the Atlantic. She, too, hit an iceberg; she, too, sank. And, like the liner in the novel, she did not have enough lifeboats – only 20, in fact – and there was terrible loss of life. Of the 2224 people on board the luxury liner, 1513 perished in the icy waters. Robertson even came close to getting the vessel's name right – he called it the SS *Titan*.

Another work of fiction about a similar tragedy had appeared in a London newspaper some years earlier. The editor was a distinguished journalist, W. T. Stead, who added a prophetic note to the end of the story: 'This is exactly what might take place, and what will take place, if liners are sent to sea short of boats.' By an ironic twist of fate, Stead was one of the passengers on the *Titanic* who died for that very reason.

Such cases are rare, however, and for every prediction that is fulfilled there are perhaps a thousand that are not. In 1979 the Mind Science Foundation of San Antonio, Texas, USA, came up with a novel experiment to test how accurately people could predict an event. The American Skylab space station had begun to fall out of orbit and, although it was known for certain that it





would eventually fall to Earth, scientists did not know when this would occur or where it would land. The Foundation invited people known to have psychic powers – and anyone else who wanted to participate – to predict the date of Skylab's fall and the spot on Earth where its remains would land. It called the exercise Project Chicken Little, and over 200 people responded to the appeal. Their predictions were analysed and published before Skylab fell – and they were virtually all wrong: very few came close to the date of Skylab's return (11 June) and even fewer guessed that it would land in Australia.

Bombs and assassinations

While experiments to prove that the future can be predicted have not been very successful, some individuals nevertheless seem to excel at prophecy. Nostradamus, for example, the 16th-century seer, made many prophecies that have apparently come true. Not everyone agrees with their interpretation, however. Take this one, for example:

Near the harbour and in two cities will be two scourges, the like of which have never been seen. Hunger, plague within, people thrown out by the sword will cry for help from the great immortal God.

What does it predict? Nostradamus's followers say it is a prediction of the atom bomb attacks on Nagasaki and Hiroshima in 1945. But no one could have used his prophecy to foretell the events. In other words, it is hindsight that gives credibility to Nostradamus' writings.

A modern seer is Jeane Dixon, who predicted the assassinations of President John F. Kennedy, his brother Robert Kennedy, and civil rights leader Martin Luther King. Her premonition of the American president's murder came 11 years before the event and before he had even become President.

A devout woman, she had gone to St



Matthew's Cathedral in Washington one morning in 1952 to pray, and was standing before a statue of the Virgin Mary when she had a vision of the White House. The numerals 1 – 9 – 6 – 0 appeared above it against a dark cloud. A young, blue-eyed man stood at the door. A voice told her that a Democrat, who would be inaugurated as President in 1960, would be assassinated while in office.

She predicted his brother's death in 1968 – in an even more startling way – while addressing a convention at the Ambassador Hotel, Los Angeles. She invited questions from the floor and one woman asked if Robert Kennedy would become president. Suddenly, Jeane Dixon saw a black curtain fall between her and the audience, and she

Above: Nostradamus, the 16th-century seer, is credited with having prophesied the atom bomb attacks on Nagasaki and Hiroshima (above left) in 1945. But his writings are couched in such general terms that it is difficult to tell precisely what they predict

Below: Jeane Dixon, the modern American seer who predicted the assassinations of President John F. Kennedy, his brother Robert Kennedy (left) and civil rights leader Martin Luther King



told the questioner: 'No, he will not. He will never be President of the United States because of a tragedy right here in this hotel.'

A week later Robert Kennedy was gunned down in the Ambassador Hotel.

But even Jeane Dixon doesn't get all her predictions right. In fact, even the best seers claim no more than a 70 per cent success rate, and sceptics argue that it appears so high only because their predictions are vague.

Sceptics, of course, will argue that it is impossible to look into the future. Many of them feel that, until the existence of precognition is proved in the laboratory, it cannot be taken seriously. But, although it may not be easy to look ahead at will, there remain on record some extraordinary stories of premonition that are difficult to explain according to the laws of conventional science – unless there is something wrong with our concept of space and time.

A first-class example of this is the experience of Mark Twain. Before he became a famous writer – and while he was still known by the name Sam Clemens – he worked as an apprentice pilot on a steamboat, the *Pennsylvania*, which plied the Mississippi river. His younger brother Henry worked as a clerk on the same boat. Sam went to visit his sister in St Louis, and, while he was there, he had a vivid dream. He saw a metal coffin

resting on two chairs. In it was his brother and, resting on his chest, a bouquet of white flowers with a crimson one in the middle.

A few days later, back on the boat, Sam had an argument with the chief pilot of the *Pennsylvania* and was transferred to another boat, the *Lacey*. His brother stayed aboard the *Pennsylvania*, which was travelling up the river two days ahead of the *Lacey*. When Sam reached Greenville, Mississippi, he was told that the *Pennsylvania* had blown up just outside Memphis with the loss of 150 lives. His brother Henry, however, was still alive, though badly scalded, and Sam spent six days and nights with him until he died. Exhausted, he fell into a deep sleep; when he awoke, his brother's body had been removed from the room, so he went to find it.

He found it just as he had seen it in the dream. Henry was in a metal coffin, which was resting on two chairs. But there was one detail which was missing – the flowers. As Sam watched, an elderly woman entered the room carrying a bouquet of white flowers with a single red rose in the centre. She placed them on Henry's body and left.

Mark Twain's glimpse of the future was fulfilled in every detail.

How could ESP be put to practical use? Science seeks the answers: see page 134



Samuel Clemens (1835–1910), better known as the writer Mark Twain, who had a remarkable premonition about his brother's death in a steamboat accident on the Mississippi River

On the evening of Friday, 26 May 1979 the world was shocked to learn that an American Airlines DC-10 airliner had crashed – a mass of flames and twisted wreckage – on take-off from Chicago's O'Hare International Airport. The lives of 273 people were lost in the worst disaster in the history of flying in the United States.

In Cincinnati, Ohio, 23-year-old office manager David Booth sat slumped in horrified disbelief in front of his television. For 10 consecutive nights before the disaster he had had the same terrible nightmare. First, he heard the sound of engines failing, then looked on helplessly as a huge American Airlines aeroplane swerved sharply, rolled over and crashed to the ground in a mass of red and orange flames. Not only did he see the crash and hear the explosion, he also felt the heat of the flames. Each time he awoke in terror and was obsessed all day by the memory of the hideous dream. He was sure it was a premonition: 'There was never any doubt to me that something was going to happen,' he said. 'It wasn't like a dream. It was like I was standing there watching the whole thing – like watching television.'

After several nights he could no longer keep his terrible premonition to himself and, on Tuesday, 22 May 1979, he telephoned the Federal Aviation

A nightmare comes true



Authority at the Greater Cincinnati Airport. Then he called American Airlines and a psychiatrist at the University of Cincinnati. They listened sympathetically, but that didn't make David Booth feel any better. Three days later, almost out of his mind with worry, he heard the news of the DC-10 crash.

The Federal Aviation Authority had taken David Booth's call seriously enough to attempt – in vain – to match up the details of his nightmare with some known airport or aeroplane somewhere in the country. When they heard the news of the crash, the details tallied all too well. 'It was uncanny,' said Jack Barker, public affairs officer for the southern region of the FAA. 'There were differences, but there were many similarities. The greatest similarity was his calling [naming] the airline and the airplane . . . and that [the plane] came in inverted.' Booth had mentioned a 'three-engine aircraft' resembling a DC-10, and the crash site he described was similar to the airport at Chicago.

David Booth stopped having nightmares once the disaster had happened, but he continued to feel disturbed by the whole affair. 'How can you make sense of something like that?' he asked. 'There's no explanation for it. No meaning. No conclusion. It just doesn't make sense.'



The goddess behind the mask

Christianity did not suddenly usurp the old religions of Europe. Instead, the early Church worked subtly to take over gods and shrines that had existed for centuries before the birth of Christ. As a result, the Black Madonnas are a blend of paganism and purity and, as RICHARD LEIGH and MICHAEL BAIGENT show, are still surrounded by ambiguous associations that reach far back in time to ancient religious – and even demonic – beliefs

THE MEDIEVAL KINGS of France traditionally accorded a special significance to the Black Madonnas. This attitude was particularly evident in Louis IX, who ruled during the 13th century and is now known as Saint Louis. Saint Louis had always revered the Black Madonna at Le Puy. She does not appear to have been inordinately grateful, however, because Saint Louis, having launched a crusade against the Saracens of Egypt, was resoundingly defeated and captured along with his entire army. Nevertheless, he commanded considerable respect from the sultan who had vanquished him; and on his eventual release, the sultan offered him as a gift any object he might desire from the Egyptian treasury. The King selected a statue of what he called 'Our Lady and Child' – a Black Madonna, some 27 inches (69 centimetres) high, swathed in bandages and wearing a copper crown.

This statue had been part of the Islamic treasure for centuries – indeed, it had been highly venerated by the Saracens, who claimed it had been carved by the prophet Jeremiah. In 1254, Saint Louis carried the statue back to France, and installed it at Le Puy in place of the Black Madonna which had formerly been there. At least one of the present-day Black Madonnas is thus unequivocally Eastern in origin.

Harlot and nun

The Black Madonna Saint Louis obtained in Egypt, and many of the others as well, were originally pre-Christian Mother Goddesses. It is well known that the Middle East – from Egypt, through Palestine and Syria, to Persia – was influenced by such goddesses in pre-Christian times. These Mother Goddesses were worshipped under a number of names, but they were essentially the same figure. And their appeal was extraordinarily tenacious. Demeter, for example, was worshipped at Eleusis, Greece, as late as 1801; and when two Englishmen in that year removed her statue, a major riot ensued among the peasantry.

The Mother Goddess was an extremely complex figure. She was simultaneously good and evil, creative and destructive, beneficent and malevolent, light and dark. She embodied the myriad aspects of nature – storm, drought and famine as well as bountiful harvests and the fruits of the earth. At times, she could be cruelly chaste, at times shamelessly promiscuous – a combination of harlot and nun. In order to reflect her dual character, she was sometimes depicted with one side of her face black, the other white. Alternatively, she was sometimes clad in a black and white garment. And on at least one site, there were actually two statues, identical except that one was light and the other dark.

The ancient Mother Goddess was often associated with the Moon, which passes through a spectrum of phases, from dark to full. By virtue of the Moon's influence on



Above: for thousands of years the goddess Ishtar has been associated with the Moon, which can be seen crowning the head of this figurine from Babylon

Left: the Virgin of Jasna Góra, who was declared Queen of Poland in 1656. Legend says the painting was executed by St Luke. The silver cover was presented by a Polish military order for the 600th anniversary of the installation of the image in the monastery

Right: two statuettes from Saqqara, Egypt, both representing Isis with the infant Horus on her left arm

Far right: Astarte, mounted on the back of a lion. Like the Roman goddess Diana, she carries a bow and arrow

tides, the Mother Goddess was also associated with the sea and became patroness of mariners – who revered her as ‘Star of the Sea’ or ‘Stella Maris’. This led to her being further associated with the Pole Star, and with Venus as well. Like the Moon, Venus possessed a dual aspect – that of Morning and Evening Star. The former of these aspects was regarded as sinister; this is reflected in Judaeo-Christian tradition, where the Morning Star is often linked with Lucifer.

The Mother Goddess was worshipped under a bewildering variety of names. In Egypt, for example, she was known as Isis – who was often depicted as black and holding her son, Horus, on her knee. There would seem to be little question that the Madonna obtained by Saint Louis from the Egyptian treasury was originally an Isis figure.

In northern Syria and in Babylon, the Mother Goddess was known as Ishtar – which was also the Babylonian name for the planet we call Venus. Like Isis, Ishtar was often depicted as black; and although she had beneficent aspects, many Babylonian myths – the *Epic of Gilgamesh*, for instance – stress the harmful side of her nature.

In Phoenicia, the Mother Goddess was known as Astarte, and it was in the guise of Astarte that she exercised perhaps her most profound influence on Western tradition. The Phoenicians, of course, were seafarers. In the course of their maritime movements – under the patronage of Stella Maris – they brought numerous images of Astarte to Western Europe, and these images subsequently became Black Madonnas. Like the later Christian Madonna, Astarte was often symbolised by a dove. Sometimes she was portrayed as half black, half white. Sometimes she was worshipped in the form of a triangular stone, which was occasionally white, but more often black and probably meteoric in origin. Astarte figures prominently in the Old Testament, where she is referred to as ‘Queen of Heaven’.

In the chronicles that comprise the Old Testament, Astarte, the Queen of Heaven, appears as one of the primary adversaries or

rivals of the God of Israel – the patriarchal God of Abraham and Moses. Indeed, the Israelites, on a number of occasions, defect from the God of Abraham and Moses and make their devotions to the Queen of Heaven. Jeremiah, for example, angrily condemns his people for falling away from God and *returning* to the worship of Astarte – implying that Astarte-worship was once the norm. The Old Testament tells us further that Solomon was a passionate devotee of the Queen of Heaven, to whom he erected altars on every high hill. It can be persuasively argued, in fact, that the *Song of songs* is not addressed to any mortal woman, but to Astarte. If this is true, the opening words of that famous text become particularly significant: ‘I am black, but comely, O ye daughters of Jerusalem.’

We have already noted the importance of the Black Madonna to Saint Bernard. It is thus not surprising that, of all Biblical texts, the one to which Saint Bernard most frequently addressed himself was the *Song of songs*. He is said to have written more than three hundred sermons on it.

Needless to say, Astarte was vigorously condemned by both Jewish and Christian teachers. By the advent of the Christian era, in fact, she had been masculinised and turned into the arch-demon Ashtaroth, one of the most powerful of Satan’s minions. And yet, as a Black Madonna, she continued to attract devotees – including a pillar of Christendom as august as Saint Bernard.

As we have noted, numerous Black Madonnas were undoubtedly carried to Europe by the Phoenicians. In subsequent centuries, the whole of the Mediterranean world – the world of the Mother Goddesses – fell under the sway of the Roman Empire. According to Imperial policy, the Roman army conscripted its recruits from one part of the Empire and dispatched them as garrisons to others. Thus, Roman conscripts from the Mediterranean were posted to northern Europe. Many of them brought their guardian deities with them.

There is reason to believe that the Mother





Above: the Black Madonna of Montserrat, which was either brought to the New World from Spain or executed there from a Spanish copy. It is now in the National Museum of Colonial Art, Quito, Ecuador

Below: Pope Innocent III, who gave his official blessing to the popular association of the Virgin Mary with the Moon



Goddess was already well established in Europe even before the Roman Empire established its dominion. Certain Black Madonna sites – Chartres and Le Puy, for example – were important Druidic centres, and the Black Madonnas found there may well date from Druidic times. It is known that the Celtic tribes in pre-Roman Gaul worshipped a god named Belen, whose consort and sister was the Black Virgin Belisama. The cult possessed a sacred stone at Chartres, above the subterranean crypt where the Black Madonna was subsequently found. It is thus reasonable to assume that the Black Madonna found at Chartres originally represented not the Virgin Mary, but Belisama. Similarly, the Black Madonna found at Sion-Vaudémont in Lorraine seems to have represented the goddess Rosemertha – the local consort of the Teutonic god Wotan, from whom Vaudémont ('Wotan's Mount') derives its name.

As the Roman legions overran western Europe, the native Mother Goddesses were amalgamated with their imported Roman equivalents. Celtic and Teutonic deities were identified with the corresponding god or goddess in the Roman pantheon. Arduina, the tutelary goddess of the Ardennes, was equated with the Roman moon goddess Diana. Diana, however, represented only

one aspect of the Moon – the bright, benevolent and chaste aspect. Arduina incorporated the dark side of the Moon as well, and, in this capacity, was portrayed as a Black Madonna. One of the centres of her cult was the town of Lunéville ('City of the Moon'), where a large statue of her was situated. In the 6th century, this statue was destroyed by a zealous Christian missionary. Nevertheless, the cult of Arduina persisted. As late as 1304, the Church was still issuing vehement edicts against it.

Pagan predecessors

When Christianity first spread to Europe, it was a rigorously patriarchal creed. This rendered it unpalatable to the populace at large, who sought in it an equivalent of their ancient Mother Goddesses and could not find any. In order to establish a foothold, Christianity had to adapt itself, had to render itself more acceptable to its potential converts. Thus, the cult of the Virgin Mary was introduced and made to harmonise in as many respects as possible with previous beliefs. Mary's Assumption, for example, was officially celebrated on 15 August – the date of the chief festival to Diana.

For the same reason Mary, in the popular mind at least if not in that of the theologian, came to be associated with the Moon. European peasants would refer to her as 'Our Moon', 'Perfect and Eternal Moon' and 'Moon of the Church'. Alternatively, the Moon itself was often called 'Notre Dame'. Confronted by this popular identification the Church was obliged to make certain concessions. Pope Innocent III sanctioned the association of Mary and the Moon thus:

Towards the moon it is that he who is buried in the shadow of sin should gaze. Having lost divine grace, the day disappears, the sun no longer shines for him, but the moon is still on the horizon. Let him speak to Mary; under her guidance many every day find their way to God.

Identification with the Moon was not the only respect in which Mary came to take on attributes of the old Mother Goddesses. By the Middle Ages, as we have seen, she had acquired Astarte's former title, 'Queen of Heaven'. She had also acquired from Astarte the title 'Stella Maris', 'Star of the Sea'.

This Mary, had precious little to do with the Virgin Mary of the Gospels or of official theology. In fact she remained an essentially pagan Mother Goddess, overlaid by a transparently thin veneer of Christianity. The people themselves did not bother to quibble about names. The goddess, for them, had once been called Belisama or Arduina or Rosemertha. Now the Church insisted that she be called Mary. But despite the new designation, she herself remained essentially unchanged.

However, the figure of Mary as propagated by the Church does not seem to have



to it, to propitiate it. This situation seems to have dictated a search for an alternative feminine figure within the context of established Christianity – a figure who, unlike the Virgin, *could* accommodate the darker aspects of the old Mother Goddesses.

Such a figure was readily available in the Magdalene, who represented everything the Virgin did not. Concurrent with the cult of the Virgin, there arose a cult of the Magdalene, which gained increasing status during the Middle Ages. While the Church insisted on a rigorous distinction between the Virgin and the Magdalene, the people sought a conception of the feminine which reconciled and combined the two – and thereby constituted an organic continuation and perpetuation of the Mother Goddesses. This seems to have found expression in the already ambiguous figure of the Black Madonna.

Most Black Madonnas were loosely associated, at least in part, with the Virgin. When first discovered, the pre-Christian statues were regarded as miraculous pagan precognitions of Jesus' birth. As we have seen, however, the Black Madonnas were also attributed with characteristics and powers quite divorced from the Virgin – sexuality, for example, fertility, marriage, the underworld, earthly rather than heavenly bliss, matter rather than spirit. To this extent, the Black Madonnas represent the Magdalene as much as they do the Virgin – indeed in some ways more so. In fact, there are certain Black Madonnas which, quite explicitly, are not associated with the Virgin

harmonised with her pagan predecessors as perfectly as might have been desired. As we have seen, the ancient Mother Goddesses were multi-faceted and characterised by a dual nature. They combined, in one and the same figure, diametrically opposed attributes – the conflicting attributes traditionally ascribed to the feminine principle. Christianity refused to acknowledge this ambivalence. Instead, it postulated a Virgin who was pure, immaculate, chaste, asexual, totally devoid of any negative or dark aspects – in short, an idealised and ultimately lopsided image.

To the former devotees of a complex, multi-faceted conception of the feminine, the image of Mary promulgated by the Church seems to have been oversimplified, incomplete, perhaps even 'too good to be true'. Through their own personal experience, they were already familiar with other, darker aspects of both femininity and nature – aspects which Mary, pristine and unsullied as she was, could not accommodate. To whom could they ascribe the negative aspects of their former Mother Goddesses? The Church insisted that these aspects be ascribed to the Devil; but the people themselves did not see the 'dark' side of the feminine as unequivocally evil. And in any case, evil or not, they had often of necessity to come to terms with it, to appeal



Above left: the naive simplicity with which the Virgin and Child could be represented as dark-skinned is exemplified in this early 14th-century painting from Sienna

Left: the idealised image of the Virgin Mary in Renaissance and modern art owes a great deal to the studio of Botticelli. In this tondo (now in the National Gallery, London) the basic human qualities of the figures have become asexual, antiseptic abstractions

at all, but with the Magdalene. Les Saintes Maries de la Mer near Marseilles, for instance, is a major centre for the cult of the Magdalene; and the Black Madonna there is generally acknowledged to represent the Magdalene. On this basis, it might be argued that *all* Black Madonnas – at least in Christian times – were once deemed to represent Jesus' companion, rather than his mother.

Black Madonnas, lines of force, and a ship that breasts the sea of time: see page 154



The way to the stars

An astronaut might be able to travel through a black hole to distant parts of our Universe. But how would he return? ADRIAN BERRY believes that by creating white holes astronauts will return to their point of departure – instantaneously

IN THE DISTANT future, perhaps three to six centuries from now, a fleet of 1000 interstellar bulldozers could be setting off from Earth for a point in space one light year from the Sun. Their mission: the construction of a black hole, through which astronauts could travel to other parts of our Universe.

The idea may seem fantastic, but the difficulties involved in gathering the material needed to build a black hole with a total mass of more than 3 million times the mass of Earth will not be quite as great as it might seem. Each interstellar bulldozer will be capable of generating a magnetic field some 150,000 miles (240,000 kilometres) wide; a field capable of gathering matter, mainly iron, nickel and hydrogen plasma, as soon as the bulldozer is beyond the orbits of the outer planets of our solar system. To generate this

huge magnetic field, electrical energy can be supplied through a superconducting system powered by the vehicle's main engine. The iron, nickel and hydrogen plasma piling up in front of the magnetic field will form a great column of matter stretching forward for hundreds of thousands of miles. This mass will be propelled forward by the vehicle.

We can calculate that the interstellar matter will be gathered up at the rate of 35 ounces (990 grams) per second per ship; or, if a fleet of 1000 ships is at work, at a rate of 35,000 ounces (990 kilograms) per second: about 3500 tonnes per hour.

Suppose that, because of the great distances involved in their journey one light-year round the Sun, 20 years elapse between the time that the ships embark on their mission and the time that they begin to accumulate matter in significant quantities. After this

If astronauts are to travel through artificial black holes to remote parts of the Universe, vast cities in space will have to be built to act as bases for operations

period, their task will be made easier by a factor working in their favour: the accumulated matter will itself ionise fresh matter, which will in turn be caught up in the eddying forward movement.

It is not unreasonable to predict that when this process of accumulation really begins to mount, its actual rate of increase will itself increase at a rate of perhaps 1 per cent every 24 hours. Now anything that increases at 1 per cent per day will double, by compound interest, every 70 days. If such a rate of doubling can be achieved with the ships cruising at about 7 per cent of the speed of light, or 47 million mph (76 million km/h), a black hole can be constructed about 15 years after the end of the 20-year preparation period – less than 40 years from start to finish.

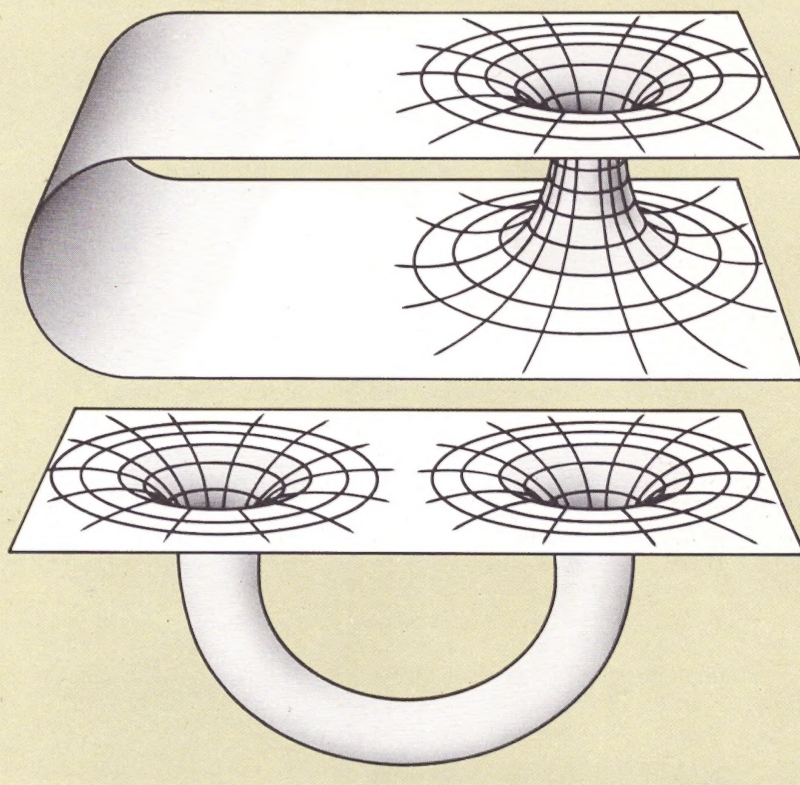
Gateway in space

Having constructed the black hole, what happens to an astronaut attempting to enter it? Should he just let himself go, abandoning the controls of his spacecraft to the gravitational fields, trusting that he will be safely hurled down the whirling spiral? No, for if he did this he would be sucked into the singularity and be crushed to pieces. Instead, he must remember the disc shape of the black hole. This disc (assuming that the black hole has 10 times the mass of the Sun) will have a circumference of just under 116 miles (190 kilometres) rotating at a velocity of 1000 complete revolutions per second. Each part of the disc will be revolving at a speed of 116,000 miles per second (190,000 km/s). The astronaut must match this speed precisely as he approaches the black hole. This speed, which is slightly more than 60 per cent of the speed of light, is not prohibited by any scientific law but could only be attained by some super-spacecraft of the future.

When the astronaut has matched his speed with that of the spinning disc, each in a sense will now be stationary, relative to each other. The astronaut 'looks' at the disc-edge beside him and 'sees' a long rectangular aperture with a height of about 640 yards (590 metres). This aperture is the gateway to another region in space and is the one route which passes through both event horizons (inner and outer) and avoids the crushing densities of the singularity. Diving directly into the aperture, the astronaut and his ship vanish from the sight of any outside observer. Yet they survive; they vanish only in the sense that a spectator at an airport sees an aircraft and its passengers vanish into the sky. For the astronaut and his ship will have vanished out of the immediate region of space. They will have accomplished the miracle of vanishing in one place and reappearing, a moment later, in another place which may be separated from the point of disappearance by a vast distance. How does this miracle occur? What actually happens in the region between the two event horizons?

This region is highly mysterious, but

Albert Einstein and Isaac Rosen developed this simple model (top) of a static black hole – the famous Einstein–Rosen bridge. A spacecraft entering the black hole along the upper surface of spacetime will emerge on the lower surface – but where will this be? Einstein and Rosen suggested that spacetime in our Universe may be curved (centre), so the spaceship will emerge at a different time and place; but if, as astronomers now believe, spacetime in our Universe, is almost flat, the shape of the Einstein–Rosen bridge could look more like a wormhole (bottom) linking different parts of our Universe



there is one thing that can be said of it with certainty; distances within it are abridged absolutely. The word 'distance' not only loses its present meaning, it ceases to have *any* meaning. By its very act of passing through the inner event horizon of the black hole, the spaceship has begun to cross what is known as an Einstein–Rosen bridge – a timeless passage that interconnects different regions of our Universe – and, an immeasurable fraction of a second later, emerges in another and distant part of space.

But the curious feature of entering the black hole and passing along the Einstein–Rosen bridge is that the spaceship is not only flung into another part of space, but in making this journey it is propelled *backwards* in time. The Einstein–Rosen bridge is, in fact, a time machine.

It may seem that, in talking of time travel,

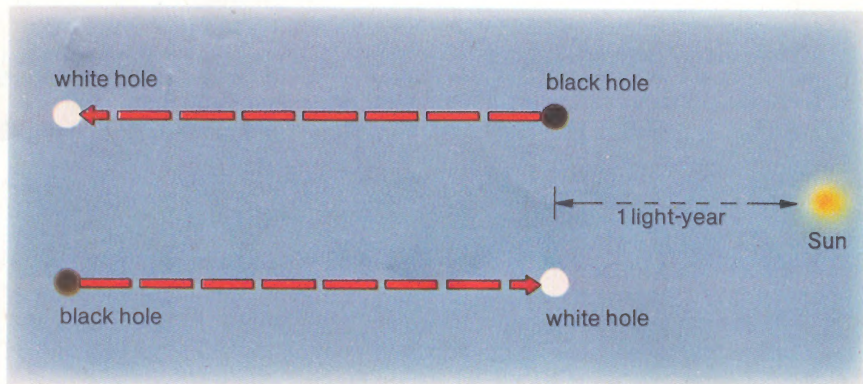
Black holes

we are entering into complete fantasy. But this is not so, for a time machine and a distance-abolishing-machine are merely two phrases to describe the same thing. Distance simply means time travelled, or to be more precise, it is the average speed of a journey multiplied by the time taken to achieve it. If, for example, a distance of 3500 miles (5630 kilometres), the distance between London and New York, was miraculously reduced to zero, you could travel this distance instantaneously, in no time at all, because zero divided by any number equals zero. Yet to make this instantaneous journey, you would be moving backwards in time *while* moving forwards in space.

Passing through the black hole, and thereby achieving an instantaneous journey to another part of the Universe, how will our astronaut ever return? Is he not lost for ever? In fact, he can return to his point of departure by way of a white hole.

A white hole is no more strange than a black hole. It is simply its opposite. A black hole is an implosion, and a white hole is an explosion. Nothing can ever escape from a black hole; everything must, sooner or later, escape from a white hole.

Do white holes exist? In theory at least, white holes should be visible from telescopes on Earth. Yet, though 'visible' they have so far proved difficult to identify. A giant white hole would, in any case, be indistinguishable from an exploding galaxy, and a relatively small one of, say, 10 solar masses, would look at a great distance like an ordinary star. J. V. Narlikar and his colleague K. M. V. Apparao of the Tata Institute of Fundamental Research in Bombay suggest that those very violent exploding galaxies known as Seyfert galaxies (after their original discoverer Carl Seyfert) could be giant white holes, presumably of many millions of solar masses, pouring back into the Universe matter that had been devoured by distant black holes. They



Above: travel between distant parts of our Universe will require *two* black holes, each with its corresponding white hole – one for the outward journey, the other for the return journey. The 'outward' black hole would be constructed at a convenient and safe distance – say about one light-year – from the Sun; the black holes and their corresponding white holes would be several light-years apart. The arrows indicate the only possible directions of travel

propose that the physical mechanism of a white hole will be identical to that of a black hole, except that everything happens in reverse. Now the nature of the Einstein-Rosen bridge, the region where forward distances are reduced to zero, predicts that the white hole will come into existence at the very same instant as its corresponding black hole. And so, if any astronaut can vanish down a black hole without himself or his ship being destroyed, then he will be able to emerge equally unscathed, a fraction of a second later, from a white hole.

If instantaneous cosmic travel is to be achieved, starting from a sort of 'cosmic railway station' one light-year from the Sun, it will not be enough simply to construct a black hole. The black hole would enable astronauts to travel instantaneously to distances of many light-years, but they would have no means of coming back, except through normal space, a journey which would take them many decades. It will be necessary to construct a *second* black hole at the distant point where they will emerge into normal space, which they will use for returning to a point no further than about one light-year from the Sun.

This second black hole, in turn, will bring into existence a second white hole. The approximate positions of the four holes, two black and two white, is shown in the diagram. Two parallel Einstein-Rosen bridges will have come into existence, with matter flowing through them in opposite directions, and each with a black hole and a white hole at their respective ends.

The construction of black holes as gateways to other universes will have answered one of the most formidable problems of future ages, the feasibility of travel to the stars. Failure to solve it could bring about the eventual stagnation and ruin of the human species. Yet if it can be solved, whether by the method outlined here or by any other, the prospect will instead be the establishment of a Galactic community, a society in which our descendants will be scattered through millions of worlds in orbits around countless stars. Humanity will be safe for ever from the threat of extinction, and there need be no limit to the flowering of human culture that this diversity will produce.



Left: Seyfert galaxies, like this one, are believed to be giant white holes pouring matter back into the Universe as fast as black holes are taking it out

Further reading

Adrian Berry, *The iron sun*, Coronet 1979
John Gribbin, *Time warps*, Dent 1979
William J. Kaufmann III, *Black holes and warped spacetime*, Freeman (San Francisco) 1979
William J. Kaufmann III, *The cosmic frontiers of general relativity*, Penguin 1979
John Taylor, *Black holes*, Fontana 1974

The house that haunted me

I HAD DREAMT IT again – exactly the same dream. There was nothing scary about it; it had been exactly the same for as long as I could remember.

I would walk up a short flight of stone steps to a porch with a stone pillar on either side. I would push the front door, it would open and I would be standing in a small hall. Sometimes I would enter the room on the right, which was quite small, and sometimes the room on the left.

The room on the left was the most interesting. It ran from the front to the back of the house, and had an unusual round sofa in the middle of the room. At one end there was a door that led to a flight of steps, which led down to the garden. I remember the garden only at night, when there were fairy lights hung all around.

The dream would always end with me in the cellar surrounded by lots of me's, all in exactly the same pose. Over the years I worked out that this meant the cellar walls were lined with mirrors.

I think I must have first dreamt this scenario when I was very young because I can't remember a time when it wasn't part of my life. Then, one day, something happened and I never visited the house again – at least not in my dreams.

Two actor friends of mine invited me over to see their new flat. I didn't live too far away, so, together with my wife Ann, I got into the car and set off in search of my friends' new digs.

Akerman Road in Brixton, south London, was our destination. I wasn't at all familiar with this area, but, as we turned the corner into Akerman Road, I had that disturbing sensation of having been there before. We drove slowly down the road and I said: 'This is it, this is the house!'

'Don't be silly,' said my wife, 'there's no number on the door and it's number 56 we want.'

'This is the house,' I said.

'But we've never been down this street before!'

'I recognise the porch,' I said.

'Oh, really!' said Ann, with a suspicious sideways glance.

I was out of the car almost before we'd stopped. Yes, this was the place!

My wife rang the bell and our friends opened the door. I stepped inside without even saying hello.

'I know this house,' I muttered. 'In that room on the right there's . . .' And I proceeded to describe the room. A quick

Born in Croydon on 16 May 1936, actor and comedian Roy Hudd has worked in variety, films, theatre, radio and television for many years. He has always had a great love for stars of the bygone age of music hall and in 1968 his performance as Dan Leno, the renowned music hall artiste, was much acclaimed by the critics. But Roy's acquaintance with Leno began in the strangest way



glance inside and, yes, it was just as it had appeared in my dream.

'And this one on the left, . . .' I described that one, too. It was just how I'd always seen it. There was no round sofa, but the staircase leading down to the garden was there.

I sat down white-faced and shaking, and turned to my companions. They were completely bewildered by my behaviour.

I told them the story of my recurring dream and a long pause followed. My friends then explained that a famous Victorian music hall comedian, Dan Leno, had lived in the house for three years. They took me outside to show me the plaque that commemorated his stay.

I hardly knew anything about Dan Leno, but I soon made it my business to find out as much as I could.

Dan Leno was the most popular comedian of his day. Born in 1860, he made his first appearance on stage at the age of four. He then went on to become a world-famous clog dancer, a great pantomime performer and the inventor of some of the funniest stories ever heard on the British stage.

At the height of his popularity, Dan Leno suffered several nervous breakdowns. He died in his early forties, worn out physically and mentally, and was mourned by the entire nation.

I became fascinated with Leno and after telling the story of my dream to a director friend of mine, John Duncan, I collaborated with him on a television version of Leno's autobiography – *Dan Leno – hys booke*. I prefaced the programme with the story of my recurring dream and this brought me lots of letters from all sorts of people.

The letters came from ex-music hall performers, spiritualists, mediums, Leno fans and Brixton residents. The spiritualists and mediums said that Leno was forever 'getting in touch' with cheerful messages, and many of the performers said he'd actually 'appeared' to them at the Drury Lane Theatre, in London's West End.

I discovered several facts about Leno that helped to explain some parts of my dream. He used to have parties at the Akerman Road house and he always had the garden hung with fairy lights for these! And as he was a dancer, Leno used to rehearse in front of mirrors. That could explain the images in the cellar.

Well, that's it – the story of my only strange experience. From the day of my visit to Akerman Road, I have never dreamt the dream again.

THE WORLD'S MYSTERIOUS PLACES - 6
Glastonbury Tor

